

REMARKS

In response to the above-identified Office Action, Applicant seeks reconsideration of the application. In this response, no claims are canceled, Claims 1, 10 and 19 are amended and no claims are added. Accordingly, Claims 1, 4-10, 13-29 are pending.

I. Claim Amendments

In the Office Action, the Examiner indicates that the limitation "such that counters associated with events that are not selected from said at least one performance object are not incremented during the collection session" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time of the application was filed, had possession of the claimed invention. In response, Applicant has amended the claims to delete this limitation from Claims 1, 10 and 19. Applicant respectfully requests the Examiner to enter the claim amendments since the amendments to Claims 1, 10 and 19 do not raise new issues that would require further consideration or search. Additionally, Applicant submits the amendments to Claims 1, 10 and 19 serve to (1) remove issues for appeal and/or (2) adopt examiner suggestions.

II. Ranganathan Is Not A Suitable 103(A) Reference

In the Office Action, the Examiner rejects Claims 15, 16 and 20-24 under 35 U.S.C. 103(a) as being unpatentable over Jouppi in view of Ranganathan (U.S. Patent No. 6,098,169). Claim 25 is rejected under 35 U.S.C. §103(a) as being unpatentable over Jouppi in view of Ranganathan and further in view of Anderson. Applicant respectfully traverses these rejections.

Applicant respectfully submits that Ranganathan qualifies as prior art under 35 U.S.C. §102(e) and the subject matter described in Ranganathan and the subject matter of all pending claims were, at the time the invention was made, subject to an obligation of assignment to the same entity, Intel Corporation. Pursuant to 35 U.S.C. § 103(c), Ranganathan is not a suitable §103(a) reference and does not preclude patentability of Claims 15, 16 and 20-25 under 35 U.S.C. §103(a). Since Ranganathan is cited as a reference in rejecting Claims 15, 16 and 20-25, Applicant respectfully requests that the Examiner withdraw the rejection of Claims 15, 16 and 20-25.

III. Claims Rejected Under 35 U.S.C. §102(e)

Claims 1, 4, 5, 8-10, 13, 14 and 17-19 are rejected under 35 U.S.C. §102(e) as being anticipated by Jouppi et al. (U.S. Patent No. 6,112,318). Applicant respectfully traverses this rejection.

To anticipate a claim, the relied upon reference must disclose every limitation of the claim. Among other limitations, independent Claim 1 recites that at least one of the performance counters associated with the selectable events is implemented using a hardware register and at least another one of the performance counters associated with the selectable events is implemented using a software variable. Applicant submits that at least these limitations are not disclosed by Jouppi.

In accordance with one embodiment, a system is described for monitoring performance counters that exist in software codes (e.g., performance counters implemented using software variables) as well as performance counters that are implemented using hardware registers. By enabling a user to select and monitor performance counters in the form of hardware registers and software variables, this allows the user to observe relationships and interactions between the software code and various hardware components within a given computer system. Such information may be used by software developers to optimize their software application to run more effectively on the computer system.

Jouppi does not disclose a performance monitoring system that enables a user to selectively monitor performance counters that are implemented in the form of hardware register and software variables so that the user can observe relationships and interactions between software code and various hardware components. Rather, Jouppi teaches a performance counter mechanism that allows comparison between events that are counted solely using hardware count registers.

In rejecting Claim 1, the Examiner asserts that this limitation “at least another one of the performance counters associated with the selectable events is implemented using a software variable” is taught by Jouppi, citing column 5, lines 46 to column 6, line 65; column 7, line 36 to column 9, line 35; and column 16, line 52 to column 17, line 31. Applicant has reviewed the cited sections of Jouppi that the Examiner indicates teach these limitations of Claim 1, including column 5, lines 46 to column 6, line 65; column 7, line 36 to column 9, line 35; and column 16, line 52 to column 17, line 31. Applicant has been unable to discern any part of the cited sections

of Jouppi that teach a performance counter implemented using a software variable. Jouppi discloses a performance monitoring system that enables a user to select and/or combine event signals, which are monitored using counters implemented in the form of hardware registers. The portions of the Jouppi referred by the Examiner merely mentions use of hardware register. Even if Jouppi mentions use of software variables, this is insufficient, as the Examiner must show that the software variable is used as a performance counter and that the performance counter implemented using the software variable is associated with a selectable event. This showing has not been made. Thus, the Examiner has failed to establish that Jouppi teaches a performance counter associated with a selectable event that is implemented using a software variable, as recited in Claim 1.

If the Examiner believes that Jouppi teaches a performance monitoring system that enables a user to selectively monitor performance counters that are implemented in the form of hardware register and software variables so that the user can observe relationships and interactions between software code and various hardware components, Applicant requests that the Examiner specifically identify where the alleged teachings could be found.

Analogous arguments to those above apply to independent Claims 10 and 19. Particularly, as to Claim 10, Applicant submits that Jouppi fails to disclose at least one performance counter associated with a selectable event that is implemented using a software variable, as required by Claim 10. With respect to Claim 19, Applicant submits that Jouppi fails to disclose at least one performance counter that is implemented using a software variable, as required by Claim 19.

In view of the foregoing, Applicant respectfully submits that independent Claims 1, 10 and 19 are not anticipated by Jouppi and requests withdrawal of the rejection of these claims. Regarding dependent Claims 4, 5, 8, 9, 13, 14, 17, 18, Applicant submits that these claims are not anticipated by Jouppi at least for the same reasons given in connection with their base Claims 1 and 10.

IV. Claims Rejected Under 35 U.S.C. 103(a)

In the Office Action, the Examiner rejects Claims 6 and 7 under 35 U.S.C. 103(a) as being unpatentable over Jouppi in view of Anderson (“Your Right to Know; Finding Leaks and Bottlenecks with a Windows NT Perfmon COM Object”, Microsoft Corporation, January 1999).

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jouppi in view of Anderson and Agrawal et al. (U.S. Patent No. 5,881,223). Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jouppi in view Agrawal. Applicant respectfully traverses these rejections.

With respect to Claims 6 and 7, Applicant submits that these claims are dependent on independent Claim 1 and therefore, the discussion above with regard to the independent Claim 1 and Jouppi applies here. Because Jouppi does not contain limitations recited in Applicant's independent Claim 1 as set forth above, and because Anderson does not cure these deficiencies, the combination of Jouppi and Anderson does not teach or suggest Applicant's dependent Claims 6 and 7. It is therefore respectfully submitted that Claims 6 and 7 are patentable over Jouppi in view of Anderson.

As to Claims 26 and 27, Applicant submits that these claims are dependent on independent Claim 1 and therefore, the discussion above with regard to the independent Claim 1 and Jouppi applies here. Because Jouppi does not contain limitations recited in Applicant's independent Claim 1 as set forth above, and because neither Anderson nor Agrawal cures these deficiencies, the combination of Jouppi, Anderson and Agrawal does not teach or suggest Applicant's dependent Claims 26 and 27. It is therefore respectfully submitted that Claims 26 and 27 are patentable over Jouppi in view of Anderson and Agrawal.

With respect to Claims 28 and 29, Applicant submits that these claims are dependent on independent Claim 19 and therefore, the discussion above with regard to the independent Claim 19 and Jouppi applies here. Because Jouppi does not contain limitations recited in Applicant's independent Claim 19 as set forth above, and because Agrawal does not cure these deficiencies, the combination of Jouppi and Agrawal does not teach or suggest Applicant's dependent Claims 28 and 29. It is therefore respectfully submitted that Claims 28 and 29 are patentable over Jouppi in view of Agrawal.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance, and such action is earnestly solicited at the earliest possible date. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Dated: May 4, 2004

By:

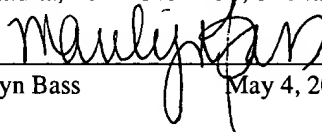


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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 4, 2004



Marilyn Bass

May 4, 2004